

## **FUZZY BASED NATURAL SPEECH CONCEPT SYSTEM**

### **ABSTRACT OF THE DISCLOSURE**

A fuzzy natural speech concept system includes: (i) a concept classification, (ii) a fuzzy conceptual grammar learning, and (iii) a natural language concept derivation system. In the system, errors due to user input complexity and recognizer problem are compensated for because the broad context is measured as a fuzzy set to which a correct concept belongs. If used in an automatic telephone conversation system, the fuzzy natural speech concept system will provide enough information about the intentions of the user as to take the most appropriate action to provide useful information and service to the user.